

ECE-345-001 (Fall 2020) ▼

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Review Test Submission: Quiz 2.2

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Course	Intro to Control Systems - Fall 2020 Section Group I67
Test	Quiz 2.2
Started	8/24/20 7:52 PM
Submitted	8/24/20 7:55 PM
Status	Completed
Attempt Score	4 out of 4 points
Time Elapsed	3 minutes
Results Displayed	Submitted Answers, Incorrectly Answered Questions

Question 1

1 out of 1 points



Which of the following is NOT a Laplace transform pair?

Selected Answer:

$$\delta(t) \leftrightarrow \frac{1}{s}$$

Question 2

1 out of 1 points



Since  $\sin(\omega t) \leftrightarrow \frac{\omega}{s^2 + \omega^2}$ , it is also true that

Selected Answer:

$$2\sin(\omega t) \leftrightarrow 2\frac{\omega}{s^2 + \omega^2}$$

Question 3

1 out of 1 points



For a signal  $x(t)$  with Laplace transform  $X(s)$ , and with  $x(0) = 3$ , the time-derivative of the signal is described by

Selected Answer:

$$\mathcal{L}\left\{\frac{dx}{dt}\right\} = sX(s) - 3$$

Question 4

1 out of 1 points



For a signal  $x(t)$  with Laplace transform  $X(s)$ , its integral is described by

Selected Answer:

$$\mathcal{L}\left\{\int_0^t x(\tau) d\tau\right\} = X(s)/s$$